

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number
WO 2005/008244 A1

(51) International Patent Classification⁷: **G01N 33/543**,
B01L 3/00

(21) International Application Number:
PCT/SE2004/001134

(22) International Filing Date: 14 July 2004 (14.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0302074-0 15 July 2003 (15.07.2003) SE

(71) Applicants and

(72) Inventors: **EKSTRÖM, Simon** [SE/SE]; Kämnräsvägen
3A:211, S-226 46 Lund (SE). **LAURELL, Thomas**
[SE/SE]; Skolbänksvägen 8, S-224 67 Lund (SE).
MARKO-VARGA, György [SE/SE]; Kungsgatan 38A,
S-211 47 Malmö (SE). **NILSSON, Johan** [SE/SE]; Östra
Kennelvägen 8, S-237 35 Bjärred (SE). **WALLMAN,**
Lars [SE/SE]; Brandstad 26, S-270 33 Sjöbo (SE).

(74) Agent: **ALBIHNS MALMÖ AB**; P.O. Box 4289, S-203
14 Malmö (SE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

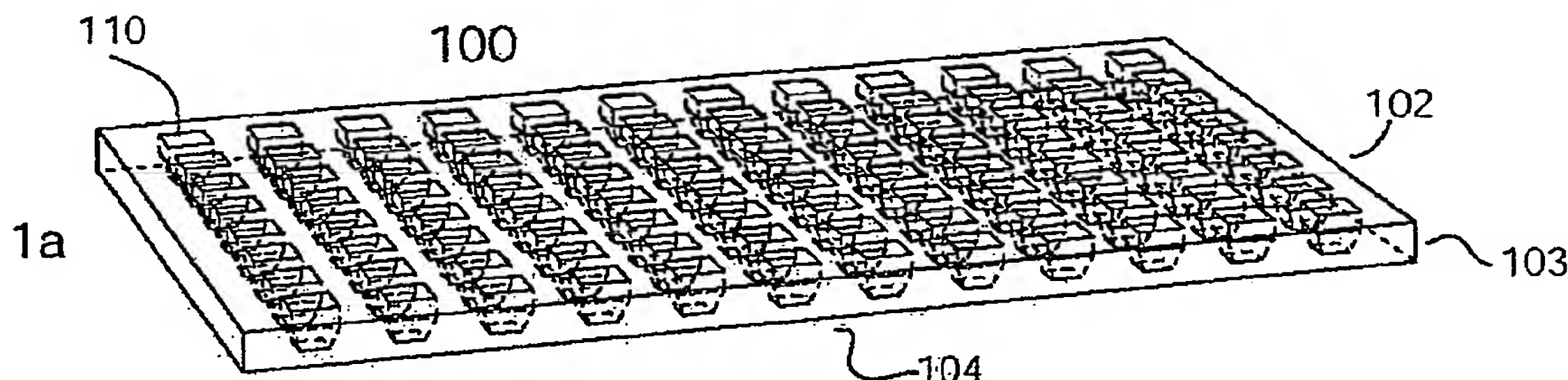
— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **DEVICE AND METHOD FOR ANALYSIS OF SAMPLES USING A COMBINED SAMPLE TREATMENT AND
SAMPLE CARRIER DEVICE**



(57) Abstract: The invention relates to devices and methods for chemical analysis, specifically to devices for extracting molecules, e.g. biomolecules such as peptides, and/or proteins, from a mixture of molecules in a solution and performing sample treatment on the extracted molecules before presenting them to an analysis instrument. The method for analysis of samples uses a combined sample treatment and sample carrier device. Said device comprises a plate with inlets at one side connected to respective compartments situated at respective array positions for receiving samples to be treated and analysed, each compartment being in communication with an outlet enabling fluid flow through the plate. The method comprises the steps of supplying an external container with a sample; optionally, subjecting the sample to a first treatment in the external container; transferring the sample to the combined sample treatment and sample carrier device; and subjecting the sample to a second treatment exploiting fluid flow through the device, wherein a medium is trapped in the device.